

EPA General Permit WAG130000 - Annual Report



**Annual Report of Operations**  
**for Year** 2021

**To comply with NPDES General Permit No. WAG130000 for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the Boundaries of the State of Washington**

**NPDES # for your Facility:**

WAG-13-0018

**Facility & Owner Information**

Facility Name: Lummi Bay Hatchery	
Operator Name (Permittee): Lummi Indian Business Council	
Address: Physical Address: 3801 "B" Haxton Way Bellingham, WA 98226	
Lummi Indian Business Council 2665 Kwina Road Bellingham, WA 98226	
Email: tomc@lummi-nsn.gov	Phone: 360-312-2320
Owner Name (if different from operator):	
Email:	Phone:

**Best Management Practices (BMP) Plan**

Has the BMP Plan been reviewed this year? ☒ Yes ☐ No

Does the BMP Plan fulfill the requirements of the General Permit? ☒ Yes ☐ No

Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary.  
No applicable or necessary changes to the BMP were warranted.

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### Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): **13,086**

Pounds of food fed to fish during the maximum month: **2,371**

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/Spawned
Coho Salmon	220,468	Lummi Bay/Southern Geogia Strait	April
Chinook Salmon	222,168	Lummi Bay/Southern Geogia Strait	April
Chum Salmon	45,468	Lummi Bay/Southern Geogia Strait	April

Fill in the table below with production numbers from the past year. List the **maximum** amount of fish on-site and the maximum amount of food fed **per month**.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	297	109	July	0	0
February	465	143	August	0	0
March	12,600	1,802	September	0	0
April	13,086	2,371	October	0	0
May	0	0	November	0	0
June	0	0	December	0	0

Additional Comments:

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### Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Type of Solid Disposed	Date Disposed	Location Disposed
Juvenile Mortalities	As needed	Garbage
Additional Comments:		

### Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish
Additional Comments: No mass mortality events $\geq 5.0\%$ .			

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### **Noncompliance Summary**

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.

No non-compliance events occurred.

### **Inspections & Repairs for Production & Wastewater Treatment Systems**

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
Monthly	N/A	Inspection of rearing ponds/raceways and associated plumbing.
Weekly	N/A	Water delivery lines, fish ladder, pumps, filters, and valves

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### Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical **during the past calendar year**.

Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Azithromycin
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Chloramine-T: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Chlorine
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Draxxin
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Erythromycin - injectable
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Erythromycin - medicated feed
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Florfenicol (Aquaflor)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Formalin - 37% formaldehyde: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Herbicide - describe:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hormone - describe:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Hydrogen Peroxide: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Iodine: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxytetracycline
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Potassium Permanganate: <i>See additional reporting requirements on page 7</i>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Romet
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	SLICE (emamectin benzoate)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sodium Chloride - salt
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Vibrio vaccine
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Other:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Other:

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**Aquaculture Drugs and Chemicals (cont'd)**

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: <b>N/A</b>		Generic Name: <b>Vibrio vaccine</b>	
Reason for use: <b>Prevention of vibriosis caused by Vibrio anguillarum</b>			
<input checked="" type="checkbox"/> Preventative/Prophylactic <input type="checkbox"/> As-needed	Total quantity of formulated product per treatment (specify units): <b>1 quart</b>	Total quantity of formulated product used in past year (specify units): <b>6 gallons</b>	
Date(s) of treatment: <b>March 14 - 23, 2021</b>			Total number of treatments in past year: <b>24</b>
Maximum daily volume of treated water: <b>Approx. 25 gallons</b>	Treatment concentration (specify units): <b>1:100 dilution</b>	Duration and frequency of treatment(s): <b>30 second bath for all fish at marking</b>	
Method of application: <input checked="" type="checkbox"/> Static Bath <input type="checkbox"/> Medicated Feed <input type="checkbox"/> Flow-through <input type="checkbox"/> Other (describe):			
Location in facility chemical was used (check all that apply): <input type="checkbox"/> Raceways <input type="checkbox"/> Ponds <input checked="" type="checkbox"/> Other (describe): <input type="checkbox"/> Incubation building <input type="checkbox"/> Off-line settling basin <b>30 gallon tub</b>			
Where did water treated with this chemical go? (check all that apply): <input type="checkbox"/> Discharged w/o treatment <input type="checkbox"/> Septic System <input type="checkbox"/> Other (describe): <input checked="" type="checkbox"/> Settling basin <input type="checkbox"/> Publicly owned treatment works			
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use: <b>All treated static bath water disposed to off-line settling basin (OLSB).</b>			

Brand Name: <b>Halamid Aqua</b>		Generic Name: <b>Chloramine-T</b>	
Reason for use: <b>Treatment for bacterial gill disease</b>			
<input type="checkbox"/> Preventative/Prophylactic <input checked="" type="checkbox"/> As-needed	Total quantity of formulated product per treatment: <b>910 grams</b>	Total quantity of formulated product used in past year (specify units): <b>110 kg</b>	
Date(s) of treatment: <b>February 25 - 27, 2021</b>			Total number of treatments in past year: <b>3</b>
Maximum daily volume of treated water: <b>8,062 gallons</b>	Treatment concentration (specify units): <b>12 ppm</b>	Duration and frequency of treatment(s): <b>1 hour/pond/day for 3 consecutive days</b>	
Method of application: <input type="checkbox"/> Static Bath <input type="checkbox"/> Medicated Feed <input checked="" type="checkbox"/> Flow-through <input type="checkbox"/> Other (describe):			
Location in facility chemical was used (check all that apply): <input type="checkbox"/> Raceways <input checked="" type="checkbox"/> Ponds <input type="checkbox"/> Other (describe): <input type="checkbox"/> Incubation building <input type="checkbox"/> Off-line settling basin			
Where did water treated with this chemical go? (check all that apply): <input type="checkbox"/> Discharged w/o treatment <input type="checkbox"/> Septic System <input type="checkbox"/> Other (describe): <input checked="" type="checkbox"/> Settling basin <input type="checkbox"/> Publicly owned treatment works			
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use: <b>All treated water diverted to off-line settling basin (OLSB).</b>			

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### Aquaculture Drugs and Chemicals (cont'd)

#### **Additional Reporting Requirements for Water-Borne Treatments**

- If a water-borne treatment was used during the calendar year, Permittees must include detailed records/calculations as an attachment to this Annual Report in order to demonstrate how the maximum effluent concentrations of solution and active ingredient were calculated for each chemical.
- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
- See also Appendix D for the Chemical Log Sheet.

Static Bath Treatments	
Tank Volume	Liters
Desired Static Bath Treatment Concentration	µg/L
Volume of Product Needed	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: Active Ingredient: Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	Specify Units
Maximum % of Facility Discharge Treated	% of Total Discharge

Flow-Through Treatments <span style="border: 1px solid red; padding: 2px;">Chloramine-T</span>	
Tank Volume	53,376 Liters
Calculated Flow Rate	378.5 Liters/Minute
Duration of Treatment	60 Minutes
Desired Flow-Through Treatment Concentration of Product	12,000 µg/L
Amount of Product to Add Initially	0.64 kg Cl-T in 19L H <sub>2</sub> O Liters Product
Amount of Product to Add During Treatment	316 mL/Minute
Total Volume of Product Needed	0.91 kg in 19L H <sub>2</sub> O Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 0 ppb - Sent to OLSB Active Ingredient: 0 ppb - Sent to OLSB Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	3,415,000gpd (No treated eff.) Specify Units
Maximum % of Facility Discharge Treated	0% - Sent to OSLB % of Total Discharge

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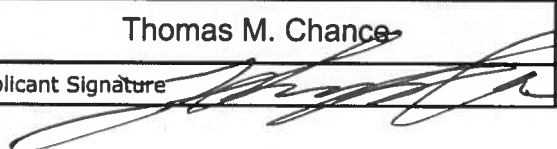
### Changes to the Facility or Operations

Describe any changes to the facility or operations since the last annual report.

No reportable changes to facility or operations for 2021.

### Signature and Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly evaluate and gather the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name of person signing	Title
Thomas M. Chance	Salmon Enhancement Program Manager
Applicant Signature 	Date Signed 1/19/2022

### Submittal Information

Send the complete, signed information, along with any attachments, to the following address:

U.S. EPA Region 10, OWW-191  
Washington Hatchery Annual Report  
1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140